

Comments or criticism?

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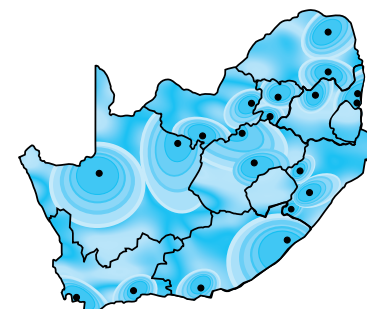
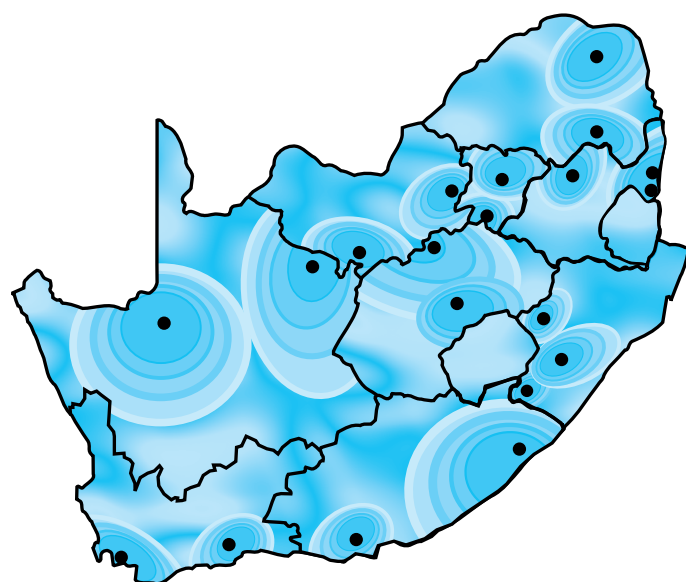
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Initiative for Sub-District Support

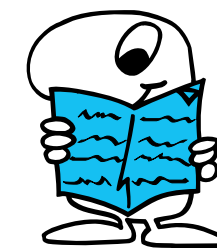
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*Initiative for
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**Kwik-Skwiz
#19**

Collecting and using Drug Use Indicators in Districts

The issue

Many districts have identified Drug Management as a key area that deserves improvement. Often the first problem that is identified is that district health facilities (mostly clinics) do not have drugs in stock. However, ensuring an adequate supply of medicine to clinics is only addressing half the problem. It is also necessary to address drug use patterns and ensure that drug use is rational. Drugs are used rationally when patients "receive medications appropriate to their clinical needs, in doses that meet their individual requirements, for an adequate period of time, and at the lowest cost to them and their community".

This KwikSkwiz deals with the measurement of drug use patterns and prescribing behaviour and also with the structures which can be used to promote rational drug use at district level and how they can use such measurement information (indicator data). Examples from an indicator study completed in the Kalahari district of the Northern Cape are used to illustrate the use of such data.

Indicators which measure key parts of the drug use process have been developed by the World Health Organisation. These are standard measures that have been applied in many settings and can therefore be used with confidence. This is obviously not a complete list of aspects that can be measured. For example, it might be useful to know what percentage of prescriptions for a specific indication comply with a Standard Treatment Guideline. When measuring antibiotic use, tuberculostatics are usually excluded. Routine immunisations are also not counted as injection usage. The WHO Core Drug Use Indicators are:

Prescribing Indicators

1. average number of drugs per encounter
2. percentage of drugs prescribed by generic name
3. percentage of encounters with an antibiotic prescribed
4. percentage of encounters with an injection prescribed
5. percentage of drugs prescribed from an essential drugs list or formulary

Patient care Indicators

6. average consultation time
7. average dispensing time
8. percentage of drugs actually dispensed
9. percentage of drugs adequately labelled
10. patient's knowledge of correct dosage

Facility Indicators

11. availability of a copy of the essential drugs list or formulary
12. availability of key drugs

File for quick reference

How did the Kalahari District collect indicators?

The process for conducting an indicator study is well described in the publication “How to investigate drug use in health facilities” WHO/DAP/93.1 which is available from WHO, and also in the MSH Manual “Managing Drug Supply”. Two basic approaches can be used. In a **retrospective** survey, prescription records are examined, and a sample of past prescriptions selected and analysed. In this way, the presence of the survey team will not alter the behaviour of the prescribers. However, indicators relating to dispensing times and patient understanding cannot be gathered. The second approach is to perform a **prospective** survey. In the Northern Cape, a prospective method was used. Here, the staff performing the study positioned themselves at clinic exits and examined the prescriptions and medicines as patients left the clinic. Data were collected on a specially designed data capture form, as follows (showing one line filled in already):

Kalahari District Drug Use Indicator Study

Part A: record the names of all medication as written

Name of medication	Strength of medication	Dose of medication	Duration of treatment
<i>Amoxil</i>	<i>250mg</i>	<i>po, 8 hourly</i>	<i>10 days</i>

Indicator	Result in the Kalahari District	Ideal value (where possible)
Average number of drugs per encounter	2.1	1.2 to 2.0
Percentage of drugs prescribed by generic name	74.7	100
Percentage of encounters with an antibiotic prescribed	40	<25%
Percentage of encounters with an analgesic prescribed	54	-
Percentage of encounters with an injection prescribed	0.4	-
Percentage of drugs prescribed from the EDL	92.5	100
Percentage of drugs actually dispensed	99.5	100
Percentage of prescriptions which contained drug name, strength, dose and duration	48	100
Percentage of drugs labelled with patient name, drug name, dosing schedule and expiry date	78	100

Part B: Indicate whether the following information is written on the label of each of the items dispensed

Patient name	Drug date	Dosing instructions	Expiry name
<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>

Clinic staff were informed of the presence of the survey team, and reassured that this was not an assessment of individual practices, but would serve as an indicator of quality of service and be used to plan directed training. A total of 282 prescriptions were captured, including some from every clinic in the region. The team aimed to collect 50 each from larger clinics and 30 each from smaller clinics. The data capture sheets were then analysed, and the following information extracted. Where possible, an ideal value for each indicator has been included.

Who can use such data and how?

The Kalahari study was co-ordinated by the regional (district) pharmacist, the PHC co-ordinator and a clinical pharmacologist from the University of Cape Town. They were able to identify some key priorities, such as the need to provide training on correct labelling, on patient education, on the use of combination painkillers and the application of the Essential Drugs List. Nursing staff were also informed about what was being done well. For example, the number of items per prescription (2.1) was very close to the target range (1.2 - 2.0).

Although this was the first such indicator study in the district, the staff involved also tried to make some comparisons with the provincial baseline data, which had been collected using similar indicators. In the Kalahari survey, prescribing of EDL drugs was more common (92.5%) than in the clinics visited in the provincial survey (78%). Prescribing by generic name was also more common (74.7% compared to 33.9%), but the use of antibiotics was similar (40% compared to 38%). Not only could more “rational” prescribing be demonstrated, but such changes (more EDL medicines, more use of generic medicines) are also associated with cost savings.

The body that can best use such data at a district level would be the Pharmacy and Therapeutics Committee (PTC), which might also be termed the Essential Drugs Programme (EDP) Implementation Team. Such committees are being established at provincial and hospital levels, as mandated by the National Drug Policy. However, district equivalents can also be useful. It is important to get the right people together for this task. These should include prescribers as well as dispensers.

A possible composition for a district PTC might be:

- medical officer(s)
- district pharmacist or district drugs co-ordinator
- nursing service manager
- nurse training co-ordinator
- clinic supervisor(s)
- programme managers (such as maternal and child health, communicable diseases)

It is important though not to have too many committees operating in parallel. This task can be combined with others and tackled by a team with a similar composition, such as a District Drugs Task Team or a Training Task Team. The primary tasks of the PTC are to develop local drug use policy, co-ordinate the application of the Essential Drugs Programme and monitor progress in this regard. It is not there to redevelop the Essential Drugs List, but can be a crucial part of working out the practical problems of implementing the List and the Standard Treatment Guidelines. For example, where the guidelines differ markedly from current practice in the district, the PTC can help to develop change protocols that will allow prescribers to safely move patients from the old medication to the new treatment. It can therefore use indicator studies to identify problem areas, monitor progress over time or assess the usefulness of a particular intervention.

Some indicators also lend themselves to being collected on a more regular basis. For example, in the Eastern Cape, availability of a set of key drugs is measured monthly in all clinics as part of the District Health Information System.

For more details on how to perform an indicator study, please refer to:-

- Managing Drug Supply (Second Edition, 1997), Management Sciences for Health. Published by Kumarian Press. This book can also be obtained at a reduced price through the South African Drug Action Programme, Private Bag X828, Pretoria 0001.
- How to investigate drug use in health facilities. Selected drug use indicators. WHO/DAP/93.1. Published by the World Health Organisation. This is available from WHO, CH-1211 Geneva 27, Switzerland. Tel +41 22 791 24 76, Fax +41 22 791 48 57, email <publications@who.ch>

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